

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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In the Matter of:)

Usage of the Public Switched Network)
By Information Service and Internet)
Access Providers)

CC Docket No. 96-263

To: The Commission

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COMMENTS OF MCI COMMUNICATIONS CORPORATION

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Summary

As the Commission observes in the Notice, today's circuit-switched public network does not handle Internet traffic efficiently. New overlay packet networks will likely bring down the cost of providing homes and businesses with access to the Internet, and to provide the increased bandwidth necessary to support new Internet applications. To encourage the deployment of these networks, the Commission should promote policies that support competitive entry in the local exchange market. Only competitive entry can determine the technologies and pricing policies that would support Internet services most efficiently.

The deployment of advanced Internet access services does not require that today's above-cost access charges be assessed on Internet Service Providers. The incumbent LECs' studies do not show, and certainly cannot demonstrate, that current access charges reflect the cost of providing access to ISPs. Above-cost access charges would only increase the price of Internet services, and would reward incumbent local exchange carriers for failing to respond to increased demand for data friendly network facilities. Until access charges are brought to economic cost, there is no justification for assessing today's inflated access charges on ISPs. If access were priced at economic cost, the imposition of such charges for the facilities necessary to provide service would have a much smaller impact on ISPs' costs than if today's access charges were imposed.

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COMMENTS OF MCI COMMUNICATIONS CORPORATION

I. Introduction

MCI hereby submits its comments in the above referenced docket.¹ MCI commends the Federal Communications Commission (FCC) for its methodical approach to reviewing the access charge exemption for enhanced service providers (ESPs). By any measure, the ESP exemption has been a resounding success. The original theory that the nascent information service industry should be treated as an end-user rather than provider for purposes of access charges has helped

¹In the Matter of Access Charge Reform, CC Docket No. 96-262; Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1; Transport Rate Structure and Pricing, CC Docket No. 91-213; Usage of the Public Switched Network By Information Service and Internet Access Providers, CC Docket No. 96-263, Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry, FCC 96-488, released December 24, 1996 (Notice).

this industry to blossom.²

Now that the character of both the ESP industry and the telecommunications industry in general is in the midst of the information revolution, a review of the rules applied to this industry is appropriate. ESPs are now offering truly mass market services to millions of consumers. The days of highly specialized services for mostly large business customers are over. The groundwork that has been laid for local competition can also have a profound effect on this segment of the industry and the ability to provide these services most efficiently. In these comments MCI will identify the principles that should be embodied in the ultimate policy on ESPs and access charges and should be the basis for an NPRM on this issue.

II. MCI's Statement of Principles for ESPs and Access Charges

MCI has strongly opposed assessing current, bloated access charges on ESPs as part of overall access reform. MCI strongly agrees with the Commission's tentative conclusion on this issue, outlined in the access reform Notice, to forbear from applying current access charges to ESPs.³ Once access charges are brought to cost, however, MCI believes a re-evaluation of the policy regarding ESPs is appropriate and consistent with the original basis for the exemption.⁴

²97 FCC 2d 682, 714.

³Notice at ¶ 288.

⁴97 FCC 2d at 714. ("Were we at the outset to impose full carrier usage charges on enhanced service providers and possibly sharers and a select few others who are currently paying local business exchange service rates for their interstate access, these

The Regional Bell Operating Companies (RBOCs) that support a policy forcing ESPs to pay current inflated access charges are simply trying to turn these companies into another source of excess overcharges to pad the RBOC bottom line.⁵ The RBOCs, by focusing on the cost of increased demand, ignore two important points about the benefits they receive from the increased growth of ESPs. First, ESPs, while not paying access, are still paying to use the network. They are paying like other business users through the monthly purchase of business lines. As the popularity of on-line services has increased, so have the revenues generated through the purchase of local business lines. Second, the growth in popularity of ESPs has been generating significant new revenues for the RBOCs from second lines which have very little cost associated with them, and from their own Internet access services.

At their core, the RBOC proposals turn the notion of the competitive market on its head. Instead of responding to increased demand by providing more data-friendly alternatives, the RBOCs propose to use this growth as an opportunity to obtain more uneconomic access charge revenue. Where competitive companies see the increased demand for enhanced services as a meaningful revenue opportunity worthy of new investment, the RBOCs want the money up-front and will decide later whether to make the investments or not. The Commission, recognizing that this is simply not the way a competitive market works, is right to reject these proposals.

entities would experience huge increases in their costs of operation which could affect their viability.”)

⁵See e.g. In the Matter of Access Charge Reform, CC Docket No. 96-262, Comments of USTA at 81; Comments of Southwestern Bell at 19.

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A. Bring Access to Cost for All Services

In many ways, access reform is critical to the ultimate success of the Local Competition Order⁶ and, therefore, critical to the success of the 1996 Act⁷. For competition to be enhanced and to ensure that consumer benefits flow to everyone, access charges for all services must be brought down to cost. While this is most critical for the development of local telephone competition, it is also important to bring access to cost before the ESP exemption is changed. Payment of current inflated access charges would simply reward the incumbent local exchange carriers (ILECs) for failing to respond to increased demand for data-friendly network facilities.

MCI advocates cost-based access prices that will encourage users to purchase efficient amounts and types of network services. This will not happen if ESPs, or other service providers for that matter, are forced to pay inflated rates for access or are forced to pay for parts of the network they do not need to deliver their services.

B. Eliminate Incentives for Inefficient Arbitrage

The current access charge exemption for ESPs creates incentives for arbitrage, which will

⁶In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, August 8, 1996. (Local Competition Order)

⁷Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996 Act), to be codified at 47 U.S.C. §§ 151 et. seq.

ultimately lead to inefficient use of the network. A prime example is the development of voice on the net (VON). VON did not develop solely because it was a superior service to traditional voice telephony. Rather, it was, in part, a creative response to inflated interstate access charges which takes advantage of a regulatory loophole. While the amount of VON is extremely small, it would not be efficient to maintain policies that encourage the use of a particular technology. Rational pricing for access to the local network is the best way to discourage inefficient technology choices and other forms of arbitrage.

C. Encourage Maximum Network Efficiency

A policy which rewards the technological foot-dragging of the Incumbent LECs would be a serious mistake. Sending data over the circuit switched network is inefficient. Access charge policy must recognize that many data services use the network differently than traditional voice services. Data communications traffic does not necessarily require use of a continuous circuit. Rather, intermittent or "bursty" communications is the norm.

The Commission's access charge regime should encourage efficiency regardless of the identity of the user. Because data communications traffic is often intermittent, a packet switched network may handle data more efficiently than today's circuit switched network, which was designed primarily for voice services. In competitive markets, an integrated provider of multiple services will design its network to permit it to price all services as low as possible in order to compete against both integrated and non-integrated providers of voice, data, and other services.

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The lack of competition in the local market has enabled monopoly LECs to avoid optimal design of their networks.

In addition, current Incumbent LEC rate structures inefficiently encourage ESPs to purchase line-side connections rather than trunk-side connections, thereby foreclosing more efficient aggregation of data traffic. The lack of competition in the local market, coupled with the large amounts of excess loop capacity in the local networks, has enabled monopoly LECs to retain inefficient prices that unnecessarily impose costs on the network. Access reform provides an opportunity to create the correct incentives and ultimately eliminate these inefficiencies.

The current recovery of the interstate allocation of loop costs on a per minute basis (through the carrier common line charge) is another distortion of appropriate rate design. Because loop costs are non-traffic sensitive, a flat rate based on the TELRIC of the loop, paid for by all providers that use the loop to deliver service, is the appropriate collection mechanism. Variable costs should continue to be recovered on a per minute basis, but should be priced at TELRIC rates that eliminates the chance of double recovery by the LECs. For instance, providers that use switched access provided by the incumbent LEC to deliver their service to customers, such as interexchange carriers, should pay access charges at the TELRIC rate.

III. Competition Is Required to Encourage More Efficient Alternatives

New technologies that would reduce the cost of handling Internet dial-up traffic and

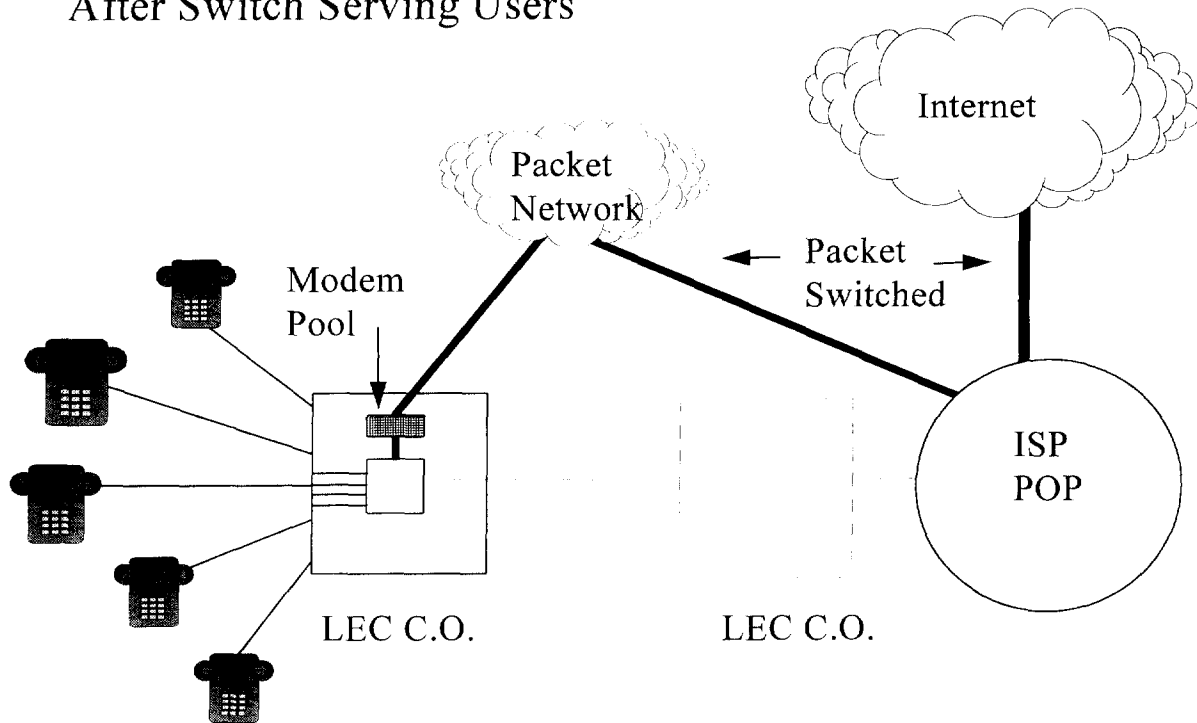
relieve any minor congestion, should it occur, are already available.⁸ As pointed out in these comments at section II.C *supra*, circuit-switched networks such as the public network do not carry data traffic efficiently.⁹ Most data communications traffic is intermittent, but in a circuit-switched network a circuit must be reserved even when there is no data to be sent, wasting network resources. Packet-switched transport, on the other hand, achieves efficiency gains by allowing a single circuit to be shared among packets from several users. Thus, cost savings could be achieved by circumventing all or part of the circuit-switched network with packet transport.

Incumbent LECs have a variety of options for constructing packet overlay networks. One option is to divert the traffic from the voice network after it passes through the switch serving the end user. (See Figure III-1) The call is diverted to a modem pool, which could be collocated at the central office, and then transferred to the Internet Service Provider (ISP) as a stream of frame relay or Asynchronous Transfer Mode (ATM) packets. While this configuration still requires a circuit-switched call through the switch serving the end user, it circumvents the switch serving the ISP, which is the more significant driver of cost and source of potential congestion.

⁸For example, Nortel offers its Internet Thruway product and Lucent and DSC offer products as well. Also, XDSL units are rapidly emerging as a data access alternative to switched service.

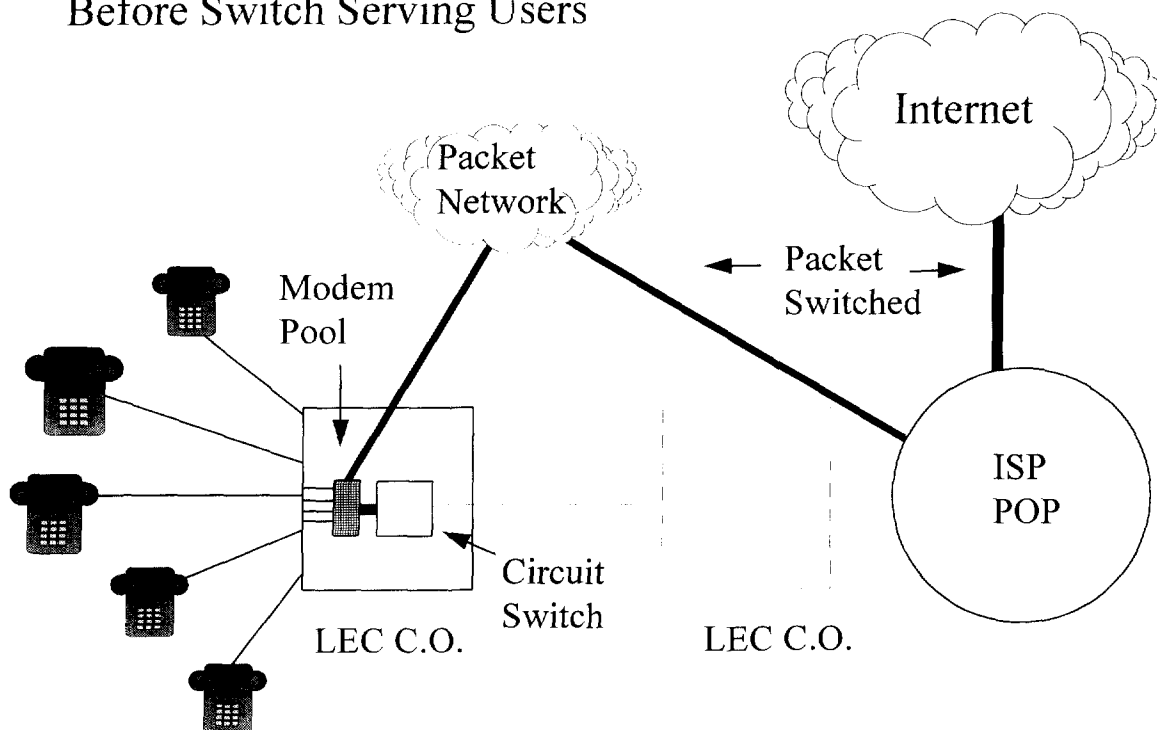
⁹Notice at ¶ 313.

Figure III-1: Packet Access Diverting Traffic After Switch Serving Users



Another option is to circumvent the voice network almost entirely, by diverting calls before they reach the switch serving the user. (See Figure III-2)

Figure III-2: Packet Access Diverting Traffic Before Switch Serving Users



In the first generation of packet overlay networks, little changes from the user's perspective. The user dials up their ISP using an ordinary modem; the fact that the call has been intercepted and transferred to the packet network is hidden. The network recognizes the dialed digits as belonging to an ISP, and diverts the call to the modem pool. The packet overlay network would increase efficiency but, because the users would continue to use ordinary modems, they would not see an increase in bandwidth. ISPs would subscribe to a packet access service if it offered reduced costs in comparison to ordinary dial-up. Cost savings would result from both network efficiency gains and the fact that the ISP would no longer have to operate its own modem pools.

Some incumbent LECs have begun to offer these packet access services and are using them for their own Internet operations.¹⁰ To date, however, it appears that these services have not attracted significant interest from unaffiliated ISPs. The incumbent LECs have argued that ISPs are unlikely to subscribe to packet access services as long as business lines are priced “artificially” low.¹¹ However, it is more likely that the monopoly LECs are pricing their packet access services well above cost. Furthermore, such a change would require a major reconfiguration, and perhaps the write-off of significant amounts of existing equipment for an ISP. These are costs that a new entrant, like the ISP subsidiary of an RBOC, would not face. The fact is, there is no evidence that the incumbent LECs are pricing their packet access services to reflect the efficiency gains that packet technologies offer. Only competition in the local exchange market can ensure that the most efficient technologies are deployed and offered at prices attractive to ISPs.

IV. Competition Is the Best Way to Encourage Advanced Services

The public telephone network is used for Internet access primarily because there is almost no alternative; it is the only ubiquitous network that can provide homes and businesses with access to the Internet. However, while the public network provides adequate access to the Internet, it is increasingly becoming a bottleneck. The public network can currently support data transmission at

¹⁰See, e.g., Bell Atlantic Plan to offer Comparably Efficient Interconnection to Providers of Enhanced Internet Access Services, March 8, 1996, at 4.

¹¹Pacific Telesis Comments, CC Docket 96-262 at 77-78.

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bit rates of only 33.6 kilobits per second or, more commonly, 28.8 kilobits per second. New Internet applications, which make heavy use of graphics and will, in the near future, make greater use of audio and video, demand more bandwidth. This is likely to spur growth in cable modems and other high bandwidth alternatives where they exist, making the RBOC proposal to increase the price of voice grade access look like a prescription for disaster akin to Western Union raising telegram prices in the face of competition from telephone companies.

High-bandwidth Internet access cannot be supported by the existing voice network. While advances in compression technology can increase what is transmitted over the public network, a separate, high-bandwidth, overlay network would provide the most efficient services. Overlay networks will likely combine new high-speed packet-switching technologies such as Asynchronous Transfer Mode (ATM) with high-bandwidth "last mile" technologies. Among the options that are under consideration for the last mile are digital subscriber line technologies, cable modems, new wireline technologies such as hybrid fiber-coax, and a variety of wireless technologies.

For telecommunications carriers, the most promising option for providing high-bandwidth Internet access is the Digital Subscriber Line (XDSL) family of technologies, which use sophisticated digital signal processing to enable high bit rate transmission over existing copper loops. DSL technologies have the advantage that they can use existing loops and therefore do not require the costly deployment of new infrastructure. DSL technologies also have the advantage that they permit the same loop to continue to be used for voice transmission, carrying voice and data in separate frequency ranges on the loop. A "POTS splitter" is used to separate the voice and data traffic at the customer premises and at the central office.

Of the DSL technologies, the best known is Asymmetric Digital Subscriber Line (ADSL), which can support a data rate of up to 9 megabits per second in the downstream direction to the user, and up to 640 kilobits per second in the upstream direction from the user to the ISP. The achievable bandwidth depends on the loop length, the quality of the cable plant, and other loop parameters. ADSL installations require an ADSL modem at the customer premises and a corresponding modem pool on the network end of the loop. An incumbent LEC would typically collocate their ADSL modem pool at the central office, either on a standalone basis or integrated with packet switches. Voice traffic would be split from the data traffic and routed through the existing circuit switches.

Most incumbent LECs are conducting trials of DSL technology, or have announced plans to roll out DSL service. It is clear, however, that a competitive market is the only way to encourage the development of high-bandwidth Internet access services. The incumbent LECs' record in the provision of advanced services is dismal. For example, the incumbent LECs have introduced ISDN services only slowly or at prohibitive rates and have largely abandoned their plans to deploy hybrid fiber-coax, after investing hundreds of millions of dollars in failed attempts to create a market for "interactive television."

In order to compete with incumbent LECs in the provision of DSL services, CLECs must be able to obtain properly-conditioned unbundled loops from the incumbent LEC. Pursuant to the Local Competition Order, if a competitor seeks to provide a digital loop functionality, such as ADSL, and the loop is not currently conditioned to carry digital signals, but it is technically feasible to condition the facility, the incumbent LEC must condition the loop to permit the transmission of

digital signals.¹² DSL services require loops that are without loading coils and meet a variety of other performance parameters. Further, successful deployment of ADSL requires that the incumbent LEC ensure that interference from other pairs in a cable does not disrupt service. For example, T1 transmission systems sharing the same cable significantly reduce the reach of ADSL services.

The Commission should also revisit the issue of subloop unbundling. One of the limitations of ADSL is that it can only be used if the loop is less than 18,000 feet in length.¹³ To provide service over loops longer than 18,000 feet, ADSL modems cannot be located in the central office; instead, they must be located closer to the customer. Thus, if a CLEC can obtain unbundled loop distribution, it can offer advanced services to a larger number of customers. Alternatively, the ability to install ADSL equipment closer to the end user would allow higher bit rate operation. Access to unbundled distribution may also be necessary to provide ADSL service in areas where the incumbent LEC has deployed digital loop carrier systems.

V. The Incumbent LECs Have Exaggerated The Cost Impacts of Internet Access

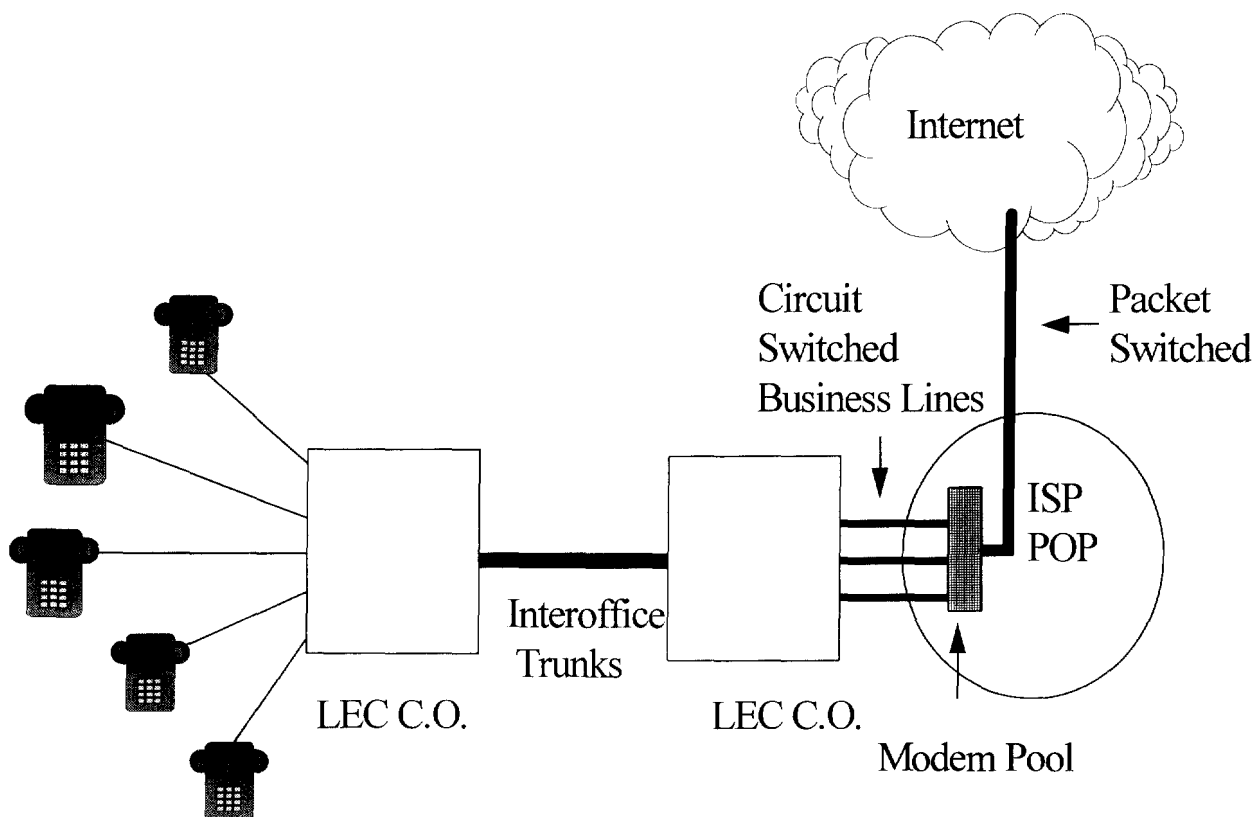
Today, the public switched telephone network plays a key role in enabling access to the Internet. Most residential and small business users of the Internet connect to their ISP using "dial-up

¹²Local Competition Order at ¶382.

¹³ Data services using ADSL require greater performance than would be needed if only voice-grade services were being provided.

access.” With dial-up access, the modem at the user’s computer sets up a call through the public network to a modem pool at the ISP’s Point of Presence (POP). Once the connection has been established, the user’s computer can send data over the public network to the ISP’s modem pool. From the modem pool, data is formatted into packets that travel through the ISP’s network to the Internet. (See Figure V-1)

Figure V-1: Dial-Up Access Over Business Lines



To accommodate dial-up users, ISPs have typically ordered a large number of ordinary

business lines in a "hunt group."¹⁴ The ISP pays the tariffed rate for business lines, together with any additional charges for the hunt group functionality. ISPs do not usually incur usage-based charges because their traffic is exclusively inbound. The ISPs' customers also do not typically pay usage-based charges, unless they are business customers or are calling from outside the local calling area. Because ISP access that is free of usage charges is attractive to customers, ISPs typically locate POPs wherever there is sufficient demand in a local calling area to justify the cost of establishing a POP.

In recent months, some incumbent LECs have claimed that existing flat-rate business line charges do not cover the costs that ISPs impose on the public network. To support this claim, the incumbent LECs have released several studies of ISP traffic patterns and network upgrade costs.¹⁵ These LECs argue that their studies show that access charges or other usage-based charges are necessary to pay for network upgrades and to send the correct pricing signals. However, while Internet traffic may represent a significant change in public network traffic patterns, the LECs have not demonstrated that ISPs should be required to pay current access charges to recover costs.

¹⁴ A hunt group allows ISP customers to reach the ISP over any of the business lines with only one number.

¹⁵Report of Bell Atlantic on Internet Traffic (Bell Atlantic Report); Letter from Glenn Brown, U S West, to James Schlichting, Chief, Competitive Pricing Division, FCC, June 28, 1996 (US West Report); Letter from Alan F. Ciamporzero, Pacific Telesis, to James Schlichting, FCC, July 2, 1996 (Pacific Report); Letter from Kenneth Rust, NYNEX, to James Schlichting, FCC, July 10, 1996 (NYNEX Report).

A. ISPs Should Not Pay Current Access Charges

Incumbent LECs have generally argued that ISPs use the public network in much the same way as IXC's and should therefore be subject to the same access charge regime as IXC's. However, the incumbent LECs' studies do not show, and certainly cannot demonstrate, that current access charges reflect the cost of providing access to ISPs.¹⁶ ISPs, like any other user of the local network, should pay charges that reflect the forward-looking economic cost of using an efficient network. Until access charges are brought to economic cost, there is no justification for assessing today's inflated access charges on ISPs.

In fact, the imposition of today's access charges would significantly increase ISPs' costs, increasing the price of Internet service and reducing the use of the Internet.¹⁷ Moreover, since the incumbent LEC's are actively marketing their own new Internet operations, requiring ISPs to pay inflated access charges causes a serious competitive problem. Just as incumbent LECs can use inflated access charges to create a price squeeze in the interexchange marketplace, inflated prices for access charged to ISPs would create a price squeeze in the Internet service market. The incumbent LEC would charge the inflated cost of access to unaffiliated ISPs while incurring only the economic

¹⁶Virtually all LECs admit current access rates are in excess of the cost of providing access service.

¹⁷Assuming 10,000 minutes per circuit per month, ISP's access costs would increase from \$40-\$50 per circuit per month to approximately \$300 per circuit per month.

cost. The benefits could then be passed on to its own Internet operation.¹⁸ If access were priced at economic cost, the imposition of such charges would have a much smaller impact on ISPs' costs than if today's access charges were imposed. However, this must be done in conjunction with incentives to ISPs and LECs to deploy affordable and efficient XDSL.

B. The Incumbent LECs Have Exaggerated the Cost Impact

The incumbent LECs have supported their arguments that the rates charged to ISPs should be increased with studies that show that ISPs' business line usage is higher than average business customer usage.¹⁹ The incumbent LECs point to the fact that business lines have been engineered and priced based on average traffic levels, and argue that current business line rates are therefore inadequate to recover the costs imposed by ISPs and other customers that use the network intensively.²⁰

ISPs do, typically, use business lines more intensively than other business customers. Usually, hold times are longer and the total number of minutes of use per day are higher for ISP lines than an average business line. In addition, the statistical distribution of Internet access call holding times differs from the distribution for ordinary voice calls. While other uses of business lines, such

¹⁸This situation would also lead to continuation of implicit subsidies to the LEC, which are not permitted under the 1996 Act.

¹⁹See, e.g., US West Report at 1.

²⁰Id.

as facsimile, show similar intensive use, ISPs and other online services are driving rapid growth in the number of high-usage lines which also brings additional revenue to the incumbent LEC.

As the number of high usage lines increases, additional switch and interoffice trunking investment may be required. The most significant impact is found at the switch serving the ISP.²¹ This switch sees an aggregation of traffic from across the local calling area; switches serving larger ISPs may have to support hundreds or even thousands of high-usage lines. Because the number of lines that can be shared by a switch's line concentrator modules depends on the traffic load, a significant increase in high-usage lines reduces the number of lines that can be shared by a line unit. Additional investment in line units is required, resulting in an increase in the per-line cost.

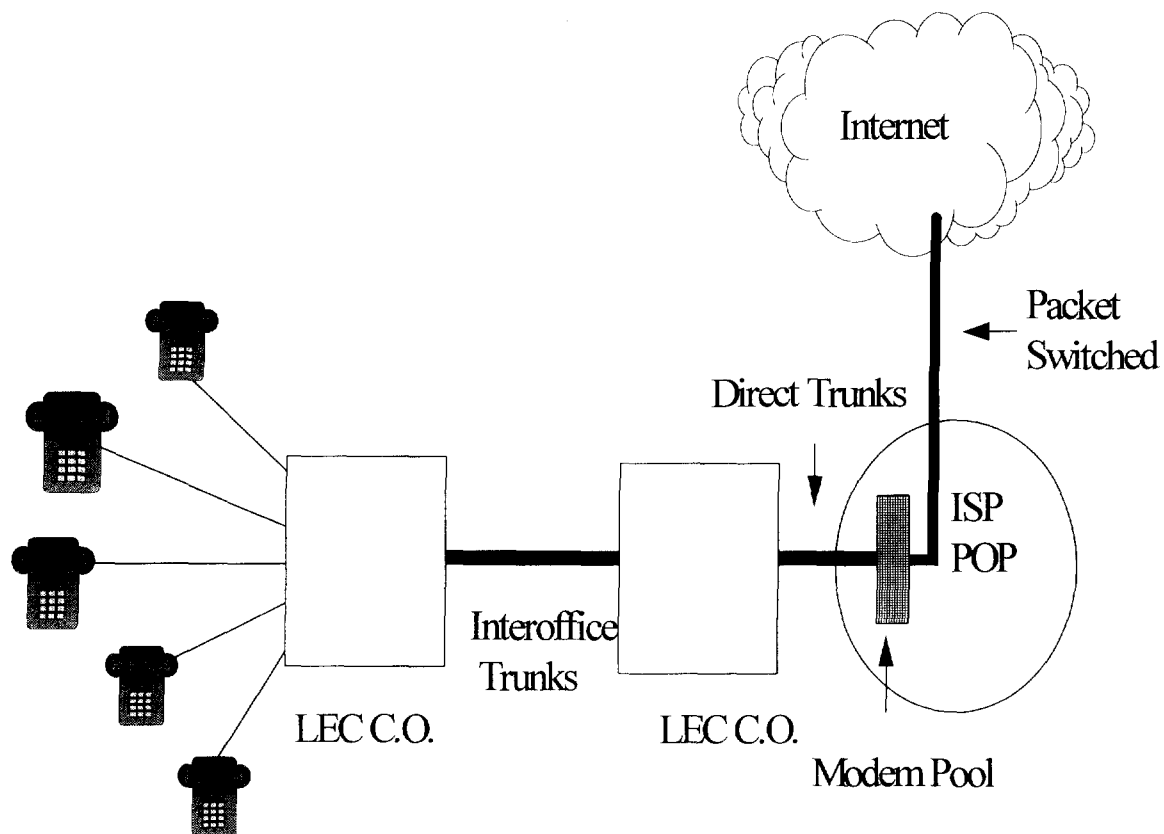
The LECs' projections of the cost impacts of Internet traffic assume continued growth in the number of business lines used by ISPs.²² However, this represents a "worst case" scenario. A growing proportion of Internet access traffic is carried from the switch to the ISP's POP over digital T1 or ISDN Primary Rate Interface (PRI) trunks, which replace 23 or 24 business lines. (See Figure V-2) Trunks are typically priced assuming traffic loads such as those imposed by PBXs and Automatic Call Distributors, whose usage patterns resemble ISP traffic to a greater extent than

²¹The amount of overbuilt plant and excess capacity beyond what is necessary to provide basic local exchanges services belies the claims that there are significant congestion problems. See e.g. CC Docket No. 96-262, Comments of AT&T, Appendix B; Selwyn and Kravtin, "Assessing Incumbent LEC Claims to Special Revenue Recovery Mechanisms: Revenue Opportunities, Market Assessments, and Further Empirical Analysis of the "Gap" Between Embedded and Forward-looking Costs"; Comments of American Association of Retired Persons, Consumer Federation of America and Consumers Union.

²²See, e.g., U S West Report at 2.

ordinary business line traffic. Thus, under most incumbent LECs' price structures, digital trunks bring in greater per-line revenues. At the same time, the per-line cost of a digital trunk is usually lower than the cost of provisioning individual business lines because trunks avoid the line concentrator modules. Bell Atlantic, for example, has stated that the per-line cost of a PRI trunk is 33% lower than the cost of provisioning a business line.²³

Figure V-2: Dial-Up Access Direct Trunks



²³Bell Atlantic Report at 14.

To a certain extent, encouraging greater use of trunks may require adjustments to the incumbent LECs' price structure. Because trunks are often more expensive than business lines on a per-line basis, the existing price structure has been a deterrent to the use of trunks by ISPs. While part of the price difference may reflect different assumptions about traffic levels, it is by no means clear that the premium charged for trunks reflects actual cost differences. More rational pricing structures for trunks would make it more attractive for the incumbent LECs to shift from ordinary business lines to digital trunks. In Bell Atlantic territory, for example, where the differential between line and trunk costs is smaller than for most incumbent LECs, approximately 50% of ISP circuits use PRI trunks.²⁴

Even without significant changes to the pricing structure, there are technological and operational factors that are leading most larger ISPs to choose trunks instead of lines, despite trunks' higher per-line cost. Digital trunks generally allow higher-quality services to be provided to the ISPs' customers. In particular, a new generation of modem technologies requires that the ISP use digital trunks between the central office and their POP. These new modems provide significantly higher bandwidth (56 kilobits per second instead of 28.8 kilobits per second) in the downstream direction to the user, which meets a market demand for higher-capacity services. Most major ISPs have announced their intention to support this modem technology, indicating that a growing number of ISP access circuits will have to be carried over trunks.

²⁴Bell Atlantic Report at 15.

C. Isolated Incidents of Congestion Do Not Demonstrate the Need for Rate Increases

Some incumbent LECs have argued that heavy Internet use is congesting the public network. However, the occurrence of congestion in certain limited instances does not indicate that revenues from services purchased by ISPs are insufficient to recover the cost of additional capacity. Indeed, the examples most often cited are in the places around the country where the highest on-line usage occurs, including Silicon Valley in California. Congestion in the public network simply indicates that the incumbent LEC has not been able to respond with sufficient speed to the increase in Internet traffic. It is unlikely that incumbent LECs were taken by complete surprise by the recent growth of the Internet. However, stiff competition among ISPs and the transition to flat-rate pricing of Internet and online services has stimulated considerable usage growth.

It appears that most incumbent LECs have been able to accommodate the growth in Internet traffic. Congestion incidents have been reported by only a small number of LECs, and congestion appears to have occurred at only a limited number of central offices that serve larger ISPs. The potential for congestion is reduced as ISP access circuits migrate to trunks, which circumvent line concentration modules. Even some incumbent LECs have downplayed the potential for disruption of the public network.²⁵ While rate increases would no doubt simplify the incumbent LECs' planning task by suppressing demand growth, this is no justification for a rate increase.

²⁵See, e.g., David Kopf, "Nipping 'Net Calls in the bud," *America's Network*, March 1, 1997, p. 48.

VI. Conclusion

Enhanced service providers, including ISPs, should not pay current, inflated, access charges. At their current level, access charges would significantly increase ISPs' costs and stymie the growth of this developing industry. As MCI points out, the incumbent LECs' plea for increased access revenues is unsupported. They have not demonstrated that their current revenues are insufficient to allow them to invest in facilities required by ISPs.

The Commission should not attempt to select any network platform or favor the development of any particular data technology. Instead, it should promote policies that encourage the development of competition in all telecommunications markets, including data markets. As MCI discusses above, many new technologies and network architectures are under consideration. Only competitive forces can determine which of these alternatives represents the most efficient solution in any given situation. Nevertheless, the Commission can ensure that pricing policies do not impede the development of competition by requiring ISPs, and all users of the public switched network, to pay only the forward-looking economic cost of using required facilities.

For ISPs, specifically, this would mean that they should not be assessed access charges at current levels. It is clear that today's access rates are well above economic cost and include subsidies that are not related to the ISP industry. Accordingly, ISPs should only be assessed access charges when those rates reflect the forward-looking economic cost of the facilities used. While the